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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/049,760 | 05/01/2002 | Oren Kramer | 27986-713 | 7597 |
| 21971 | 7590 | 03/14/2005 | EXAMINER | |
| WILSON SONSINI GOODRICH & ROSATI | | | PRIZIO JR, PETER | |
| 650 PAGE MILL ROAD | | | ART UNIT | |
| PALO ALTO, CA 943041050 | | | PAPER NUMBER | |
| | | | 2674 | |

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/049,760 | | KRAMER, OREN | |
| | Examiner | | Art Unit | |
| | Peter Prizio | | 2674 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 January 2005 has been entered.

Claim Status

2. Claims 1 – 8 are pending.
3. Claims 1 – 8 are rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1 – 4 and 6 – 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,576,981 to Parker et al (Parker) in view of US Patent 5,865,546 to Ganthier et al. (Ganthier).
6. Regarding claim 1, Parker teaches a system with removable, interchangeable keypads (Figs. 1 and 2A, B) that are removeably coupled to the housing that includes an apparatus for providing a keypad identification signal. Further, Parker states that

“those skilled in the art will readily appreciate that a plurality of electrical and/or mechanical means for providing an indication... as to which keypad is coupled... may be provided” (column 4, lines 45+). Parker also teaches Identification data that is associated with specific applications software (column 5, lines 27 – 53), but fails to provide details as to the construction of the keypad.

7. However, Ganthier (Fig. 1) teaches a personal computer keyboard (100) for use as an input device for a host personal computer (Fig. 4, 200) comprising a removable part (130) having a contact (136) and held by a foundation (102), being associated with a specific applications software to be executed on said host computer (column 6, lines 17 – 21), and a device for data connection (136), a data storage device (column 6, lines 7 – 13) and an Identification Data ID (column 5, line 66 – column 6, line 5). Ganthier further teaches a keyboard (100) comprising a fixed part (102) having a set of contacts (105), a reader device for reading ID (Fig. 3, 99 and column 6, lines 14 – 16), a first data connection (105), and a second data connection (125).

8. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a personal computer system.

9. Regarding claim 2, Ganthier (Figs. 1 & 2), as applied to claim 1 above, further teaches a personal computer keyboard (100) wherein said reader, said first data connection means, and said storage device are replaced by a mechanical member

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extending out of the removable part (135) for applying a mechanical force. Whenever said removable (130) part is placed into said fixed part (102), said mechanical force causing ID data related to a specific set to be transmitted to said host (Fig. 4, 200) via said second data connection means (125), after a predetermined period has been lapsed (column 6, lines 13 – 24).

10. Regarding claim 3, Ganthier, as applied to claim 1 above, further teaches a personal computer keyboard (100) wherein said removable part is a single rigid unit (130).

11. Regarding claim 4, Ganthier, as applied to claim 1 above, further teaches a personal computer keyboard (100) wherein said ID is embedded into said identification mechanism (column 6, lines 2 – 7).

12. Regarding claim 6, Parker teaches a system with removable, interchangeable keypads (Figs. 1 and 2A, B) that are removeably coupled to the housing that includes an apparatus for providing a keypad identification signal. Further, Parker states that “those skilled in the art will readily appreciate that a plurality of electrical and/or mechanical means for providing an indication...as to which keypad is coupled...may be provided” (column 4, lines 45+). Parker also teaches Identification data that is associated with specific applications software (column 5, lines 27 – 53), but fails to provide details as to the construction of the keypad.

13. However, Ganthier (Fig. 1) teaches a keyboard (100) for use as an input device for a host personal computer (Fig. 4, 200) comprising a removable part (130) having a contact (136) and held by a foundation (102), being associated with a specific

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applications software program to be executed on said host personal computer (column 6, lines 17 – 21), and a device for data connection (136), a data storage device (column 6, lines 7 – 13) and an Identification Data ID (column 5, line 66 – column 6, line 5).

Ganthier further teaches a personal computer keyboard (100) comprising a fixed part (102) having a set of contacts (105), a reader device for reading ID (Fig. 3, 99 and column 6, lines 14 – 16), a first data connection (105), and a second data connection (125). Ganthier also teaches a software component (99) for reading said ID and executing one or more programs or predefined operations or applications (column 5, line 66 – column 6, line 24) residing on said host computer (200).

14. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a computer system.

15. Regarding claim 7, Ganthier, as applied to claim 6 above, further teaches a personal computer keyboard (100) wherein said predefined operations are directed to setup said host personal computer (column 6, lines 17 – 20).

16. Regarding claim 8, Parker teaches a system with removable, interchangeable personal computer keypads (Figs. 1 and 2A, B) that are removeably coupled to the housing that includes an apparatus for providing a keypad identification signal. Further, Parker states that “those skilled in the art will readily appreciate that a plurality of electrical and/or mechanical means for providing an indication...as to which keypad is

coupled...may be provided" (column 4, lines 45+). Parker also teaches Identification data that is associated with specific applications software (column 5, lines 27 – 53), but fails to provide details as to the construction of the keypad.

17. However, Ganthier (Fig. 1) teaches a personal computer keyboard (100) for use as an input device for a host computer (Fig. 4, 200) comprising a removable part (130) having a contact (136) and held by a foundation (102), being associated with a specific applications software program to be executed on said host personal computer (column 6, lines 17 – 21), and a device for data connection (136), a data storage device (column 6, lines 7 – 13) and an Identification Data ID (column 5, line 66 – column 6, line 5).

Ganthier further teaches a personal computer keyboard (100) comprising a fixed part (102) having a set of contacts (105), a reader device for reading ID (Fig. 3, 99 and column 6, lines 14 – 16), a first data connection (105), and a second data connection (125). Ganthier also teaches a software component (99) for reading said ID and executing one or more applications software program, predefined operations or applications (column 5, line 66 – column 6, line 24) residing on said host personal computer (200). Further still, Ganthier teaches connecting between said removable part (130) and said fixed part (102) by contact upon placing said removable part on said fixed part (column 4, lines 24 – 29), reading said ID by said reader device (column 6, lines 14 – 16), conveying said ID from said keyboard to said host personal computer (column 5, lines 53 – 55) via said connection (125), and executing one of more programs, applications, or predefined operations being associated with said ID (column 6, lines 15 – 24).

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18. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a computer system.

19. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker in view of Ganthier as applied to claim 1 above, and further in view of US Patent 5,150,118 to Finkle.

20. Regarding claim 5, Ganthier, as applied to claim 1 above, further teaches a personal computer keyboard (100) wherein the keys layout is compatible with a standard 101-keys keyboard (column 3, lines 57 – 60), but Parker in view of Ganthier fails to teach each key interacts with a contact in a one-to-one correspondence.

21. However, Finkle teaches a similar device as Parker where each key in the particular keypad actuates a contact in a one-to one correspondence (Fig. 1) where each key will actuate each contact 14 or 16 in a non-electrical means (column 3, lines 1 – 6).

22. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad assembly as taught by Parker in view of Ganthier with the keypad using individual keys corresponding with contacts in a one-to-one pattern for the benefit of greater flexibility to design key panels (column 4, lines 223 – 31)

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US Patent 5,387,042 (Brown)
 - Teaches different keyboard language templates with identification provided on the templates to automatically change the mode of the keyboard (column 10, lines 63 – 52 and column 15, lines 13 – 38).
- b. US Patent 4,459,581 (Wilson et al.)
 - Teaches a keyboard with a language ID logic to indicate to the computer the language key set of the keyboard (column 4).
- c. US Patent 4,456,972 (Lee et al.)
 - Teaches a keyboard that contains an identification switch configuration to allow identification of the particular keyboard configurations (column 3).
- d. US Patent 6,606,669 (Nakagiri)
 - Teaches a device that automatically loads a driver or program adaptive to a peripheral device (columns 2 and 5).
- e. US Patent 6,236,392 (McCauley)
 - Teaches human interface devices (HID) that contain descriptors corresponding to each peripheral device insuring that a particular game software will run only with particular HID devices (Column 2, lines 21 – 34 and column 7, line 64 – column 8, line 8).
- f. US Patent 6,081,207 (Batio)

- Teaches a folding keyboard capable of receiving a separate keyboard or key-pod for changing the language of the keyboard (column 7, lines 37 – 55).

Response to Arguments

24. Applicant's arguments filed 23 November 2004 have been fully considered but they are not persuasive.

25. In response to applicant's arguments that there is no suggestion in the descriptions that neither Parker nor Ganthier alone or in combination teach a personal computer keyboard with identification data associated with particular applications software, however, as can be seen in the rejection above, Parker teaches removable keypads with identification data associated therewith (column 2, lines 45+) where the particular keypads are used with applications software (column 5, lines 27 – 54) while Ganthier teaches a personal computer keyboard of the more conventional type (Fig. 4) with particular identification data associated with each module (column 5, line 66 – column 6, line 5) that is used to determine the type of input device and loads appropriate software drivers (column 6, lines 13 – 24). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the keypad as taught by Parker with the modular keyboard system as taught by Ganthier since Parker teaches a removable keypad that communicates using electrical and/or non-electrical means while Ganthier provides one such configuration as a keyboard for use in a personal computer system for the benefit of a personal computer

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keyboard that automatically detects the particular input device attached and automatically loads software associated therewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Prizio whose telephone number is (703) 305-5712. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (703) 308-6725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Prizio
Examiner
Art Unit 2674

Prizio
March 1, 2005

PP

Henry N. Tran
HENRY N. TRAN
PRIMARY EXAMINER